



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | | | |
|--|--------------|----------------------|---------------------|------------------|----------|--------------|------|--|
| 09/353,383 | 07/15/1999 | TOSHIHIRO SHIMA | Q55113 | 3442 | | | | |
| <div>65565 7590 07/06/2007 SUGHRUE-265550 2100 PENNSYLVANIA AVE. NW WASHINGTON, DC 20037-3213</div> | | | | | | | | |
| <div>EXAMINER COLES, EDWARD L</div> | | | | | | | | |
| <table border="1"><thead><tr><th>ART UNIT</th><th>PAPER NUMBER</th></tr></thead><tbody><tr><td>2625</td><td></td></tr></tbody></table> | | | | | ART UNIT | PAPER NUMBER | 2625 | |
| ART UNIT | PAPER NUMBER | | | | | | | |
| 2625 | | | | | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/353,383

Applicant(s)

SHIMA, TOSHIHIRO

Examiner

King Y. Poon

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13, 16, 18 and 20-36 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 21-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 13, 16, 18 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/18/2007 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 11, 13 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 11: It is unclear "a job request" of line 13 is referring to the same "job request" of line 5 and line 8 or a different job request. It is unclear the "said job request" of line 16 and "a request" of line 18 is referring the job request of line 5 and line 8 or the job request of line 13.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph because it depends on rejected claim 11.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 11, 13, 16, 18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gase (US 6,184,996) in view of Nishi (US 6,075,616) and Pipeline Corporation (column 1, lines 48-60, Gase).

Regarding claim 11: Gase teaches a printer (printer 14, column 3, line 12) comprising: a job request section (the software code of the browser program that request print job, column 3, lines 25-30) for demanding job data (text of print job, column 3, lines 25-30) of a print job from a host computer (client processor, column 3, lines 27, that the print job is located, column 3, lines 5-8) having the job data; and a printing section (the software code of the program of the printer that controls the printer to received the transmitted text of a print job, column 3, lines 25-30, and the software code that controls the printer to print the text) for receiving and printing the job data sent from the host computer in response (response, column 3, line 29) to a request (request, column 3, line 27) from the job request section.

Gase further teaches wherein the job request section receives job location data (received URL, column 3, lines 15-20) showing a location of the job data (column 3, lines 18-20) from a print server, (the computer that generates the URL message other than the computer where the print job resided, column 3, lines 18-21, column 3, lines 5-

9; each client processor is a print server, column 3, lines 1-4, that serves the printer's request, column 1, lines 41-45, column 3, lines 25-30) and the job request section sends a job request (request, column 3, line 27) to the host computer (client processor, column 3, lines 27, that the print job is located, column 3, lines 5-8) which the job location data shows (column 3, lines 15-30).

Note: Column 5, lines 1-10, Gase teaches the printer is controlled by software procedures. It is inherent that different procedures of the printer are controlled by different software code.

Although it is would have been obvious that Gase must have a memory/buffer for storing the received print data to prevent the print data from being lost in the printer before the print data is being printed and must have a physical print device/engine for putting ink onto print media based on the received print data; it is also obvious that the printer would not send out the print request when the printer is not capable of receiving any print data, Gase does not specifically disclosed such details within the printer - a print engine, a receive buffer memory, and wherein the job request section sends said job request to the host computer according to a condition of the engine and the receive buffer memory, when said printing section ready for printing.

Nashi, in the same area using a printer for printing, shows the detail of a printer having a print engine, (200, fig. 1) a receive buffer memory, (103, fig. 1, fig. 2) and wherein said job request section sends said job request (17, fig. 4) to said host computer according to a condition of said print engine and said receive buffer memory (12, 15, fig. 4), when said printing section ready for printing (no the #12, fig. 4).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: a print engine, a receive buffer memory, and wherein the job request section sends said job

Art Unit: 2625

request to the host computer according to a condition of the engine and the receive buffer memory, when said printing section ready for printing.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer by the teaching of Nishi because of the following reasons: (a) it would have provided a hardware device/print engine to carry out the printing; (b) it would prevent the data from being lost by using a buffer; and (c) it would also prevent the host from sending print data to the printer while the printer is not capable of receiving any print data due to print engine error or memory full as suggested by Nishi, fig. 4.

Gase also does not teach the printer further comprising means which a location of each part constituting the job data is informed from the host computer, wherein the job request section can specify a desired part of the job data for the host computer based upon the informed location of each part when the job request section sends the job request, and the printing section receives only the desired part of the job data sent from the host computer in response to a request from the job request section and prints it.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: means/software code such that the printer would allow the location of each part constituting the job data to be informed from the host computer; the job request section can specify a desired part of the job data for the host computer based upon the informed location of each part when the job request section sends the job request, and the printing section receives only the desired part of the job data sent from the host computer in response to a request from the job request section and prints it.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 13: Gase teaches the printer further comprising a print server (job queue 28, column 3, lines 24) for receiving job location data (URL, column 3, line 30-35) showing a location (located, column 3, line 28) of the job data (text of print job, column 3, line 27, column 3, line 29) from the host computer (client processor, column 3, lines 27, that the print job is located, column 3, lines 5-8) and temporarily storing it, (since the print job is stored in the queue as URLs, column 3, lines 30-35, and the print job/URL in the queue would be canceled, column 4, lines 37-40, the storing of the URLs

Art Unit: 2625

are temporarily) wherein the job request section (the software code of the browser program that request print job, column 3, lines 25-30) sends the job request (column 3, lines 25-30) to the host computer (client processor, column 3, lines 27, that the print job is located, column 3, lines 5-8) which the job location data (URL, column 3, lines 24-26) stored in the print server (job queue 28, column 3, lines 24) shows.

Regarding claim 16: Gase teaches a method of operating a printer, (printer 14, column 3, line 12) comprising steps of demanding job data (sending job request, column 3, lines 25-30) of a print job from a host computer (client processor that sends the text of a print job, column 3, lines 25-30) having the job data (text of a print job, column 3, lines 29-30); and receiving and printing the job data (column 3, lines 28-30) sent from the host computer (client, column 3, line 28) in response to a job request (request, column 3, line 27) of the demanding step.

Gase also teaches a step of receiving job location data (URL, column 3, line 20) lines showing a location of the job data (column 3, lines 27-28) from a print server (the computer that generates the URL message other than the computer where the print job resided, column 3, lines 18-21, column 3, lines 5-9; each client processor is a print server, column 3, lines 1-4, that serves the printer's request, column 1, lines 41-45, column 3, lines 25-30), wherein in the step of demanding, the job request (request, column 3, lines 26-27) is sent to the host computer (client processor, column 3, lines 28-30) which the job location data shows. (Column 3, lines 25-30)

Although it is would have been obvious that Gase must have a memory/buffer for storing the received print data to prevent the print data from being lost in the printer before the print data is being printed and must have a physical print device/engine for putting ink onto print media based on the received print data; it is also obvious that the printer would not send out the print request when the printer is not capable of receiving

any print data, Gase does not specifically disclosed such details within the printer - a print engine, a receive buffer memory, and wherein the job request section sends said job request to the host computer according to a condition of the engine and the receive buffer memory when said printing section ready for printing.

Nashi, in the same area using a printer for printing, shows the detail of a printer having a print engine, (200, fig. 1) a receive buffer memory, (103, fig. 1, fig. 2) and wherein said job request section sends said job request (17, fig. 4) to said host computer according to a condition of said print engine and said receive buffer memory (12, 15, fig. 4), when said printing section ready for printing (no the #12, fig. 4).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: a print engine, a receive buffer memory, and wherein the job request section sends said job request to the host computer according to a condition of the engine and the receive buffer memory when said printing section ready for printing.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer by the teaching of Nashi because of the following reasons: (a) it would have provided a hardware device/print engine to carry out the printing; (b) it would prevent the data from being lost by using a buffer; and (c) it would also prevent the host from sending print data to the printer while the printer is not capable of receiving any print data due to print engine error or memory full as suggested by Nishi, fig. 4.

Gase also does not teach wherein, in the step of demanding, a desired part of the job data can be specified for the host computer, and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: in the step of demanding, a desired part of the job data can be specified for the host computer, and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

Regarding claim 18: Gase teaches a step of receiving job location data (received URL, column 3, lines 17) showing a location of the job data (column 3, lines 25-30) from the host computer (client processor, column 3, line 27) and temporarily storing it, (since the print job is stored in the queue as URLs, column 3, lines 30-35, and the print job/URL in the queue would be canceled, column 4, lines 37-40, the storing of the URLs is temporarily) wherein, in the step of demanding, the job request is sent to the host computer which the stored job location data shows (column 3, lines 25-30).

Regarding claim 20: Gase does not teach a step of being informed of a location of each part constituting the job data from the host computer, wherein, in the step of demanding, a desired part of the job data can be specified for the host computer based upon the informed location of each part, and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's method of operating a printer to include: a step of being informed of a location of each part constituting the job data

from the host computer; in the step of demanding, a desired part of the job data can be specified for the host computer based upon the informed location of each part; and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's method of operating a printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents- especially the multi-page document contains hundreds of pages.

Response to Arguments

6. Applicant's arguments filed 4/18/2007 have been fully considered but they are not persuasive.

With respect to applicant's argument that the cited references do not teach the printer specifies a part of the data and adjust or (controls) the quality of data; has been considered.

In reply: adjust or controls the quality of data is not part of the claimed limitation.

Gase does not teach wherein, in the step of demanding, a desired part of the job data can be specified for the host computer, and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

However, column 1, lines 47-60, Gase teaches that pipeline corporation disclosed a method that a print job (print job of a document, column 1, line 59) is divided into units of print pages (column 1, lines 58) and each print pages (part of a print job) is separately accessed by the printer by requesting the part of the print job data/page using the location information (URL) for the particular part of the print job data/page, and the host sends only the specified part of the print job data/page to the printer (column 1, lines 48-60). A user, from the user's computer, using the home page of a printer would inform the printer of a location of each part (URLs of desired print pages) constituting the job data.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer to include: in the step of demanding, a desired part of the job data can be specified for the host computer, and in the step of printing, only the desired part of the job data sent from the host computer in response to the job request is received and printed.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Gase's printer because of the following reason: (a) it would have allowed users to access the page of a document that the user is interested in printing and thereby, reduces the data to be downloaded to the printer, and speed up the printing time; and (b) since Gase already knows about the method of using URLs to represent individual print pages of a print job to be requested and printed by the printer, it would have been obvious for Gase to use URLs to represent individual

print pages of a print job to be requested and printed by the printer, when Gase only interest in printing a page within a multi-page documents-especially the multi-page document contains hundreds of pages.

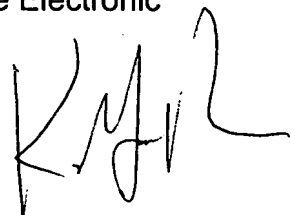
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 24, 2007



KING Y. POON
PRIMARY EXAMINER
Supervisory